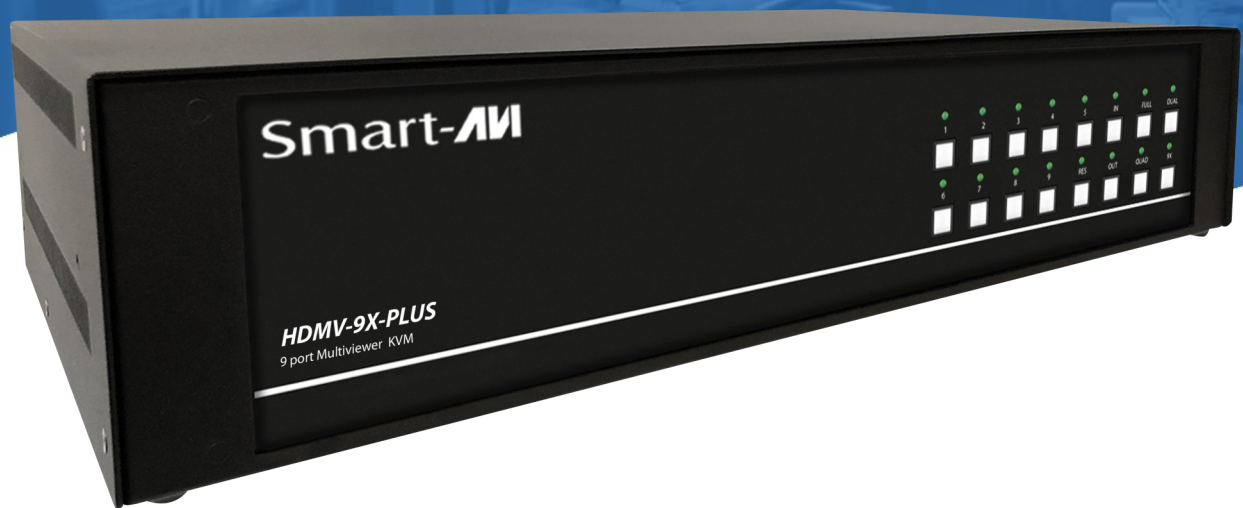


HDMV-9X-PLUS

9-PORT KVM HD MULTIVIEWER



USER MANUAL



Designed and Manufactured in the USA

Smart-AVI

1-800-284-2131
www.smartavi.com

TABLE OF CONTENT

TECHNICAL SPECIFICATIONS_____	3
WHAT'S IN THE BOX?_____	4
FRONT AND REAR_____	4
INSTALLATION_____	5
SYSTEM OPERATION_____	6
SELECTING VIEWING MODES_____	6
RESOLUTION BUTTON_____	7
RS-232 AND HOTKEY COMMANDS_____	7
TROUBLESHOOTING_____	8
TECHNICAL SUPPORT_____	8
LIMITED WARRANTY STATEMENT_____	9

TECHNICAL SPECIFICATIONS

VIDEO	
Format	HDMI
Video Bandwidth	3Gbps
Input Interface	(9) HDMI 19-pin (female)
Output Interface	(1) HDMI 19-pin (female)
HDMI Compliance	HDMI 1.4b
HDCP Compliance	HDCP 1.4
Resolution	Up to 4K2K @ 30 Hz
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
AUDIO	
Input	From HDMI Inputs
Output	(1) Connector Stereo 3.5 mm Female
USB	
Signal Type	USB 2.0, 1.1 and 1.0 Keyboard and Mouse only.
Input Interface	(9) USB Type B (female)
Output Interface	(2) USB 1.1 Type A (female) for keyboard/mouse; (2) USB 2.0
POWER	
Power Requirements	12V DC, 3A power adapter with center-pin positive polarity
ENVIRONMENT	
Operating Temperature	23 to 95°F (-5 to 35°C)
Storage Temperature	-4 to 185 °F (-20 to 85 °C)
Humidity	Up to 95% (No Condensation)
CONTROL	
Front panel	Push Buttons with LED indicators
RS-232	Via Serial @ 115200 bps
Hotkey	Via Keyboard

WHAT'S IN THE BOX?

HDMV-9X-PLUS	9-Port HDMI, USB Real-Time Multiviewer and KVM Switch.
PS12VD3A	12V DC, 3A (minimum) power adapter with center-pin positive polarity.
User Manual	

HDMV-9X-PLUS REAR

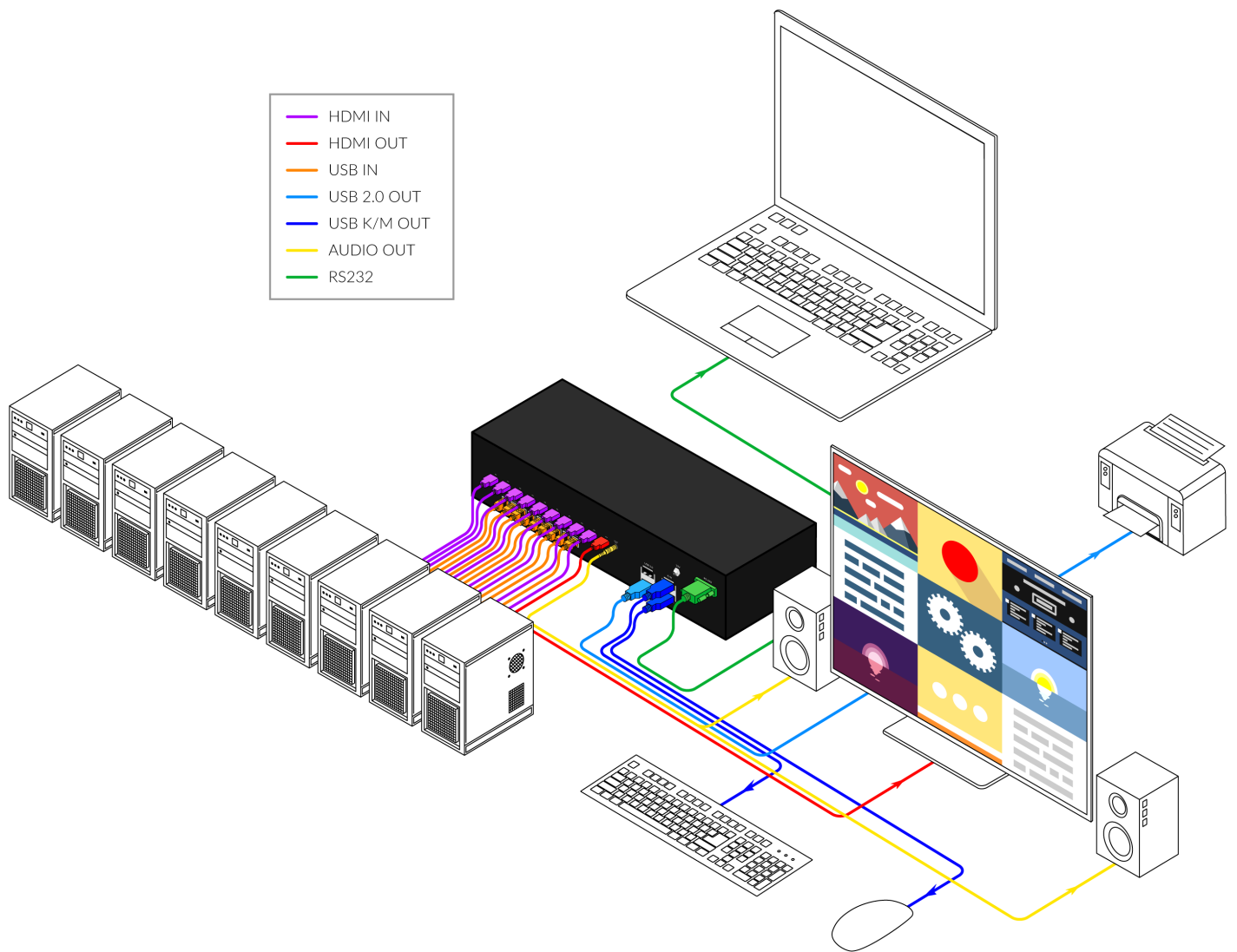


HDMV-9X-PLUS FRONT



INSTALLATION

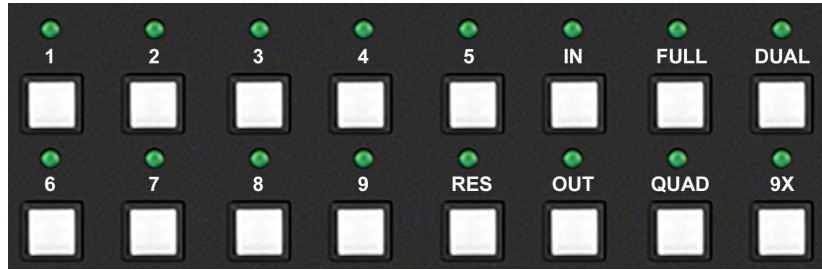
1. Ensure that power is turned off or disconnected from the unit and the computers.
2. Use a **HDMI cable** to connect the HDMI output port from each computer to the corresponding HDMI IN ports of the unit.
3. Use a USB cable (Type-A to Type-B) to connect a USB port on each computer to the respective USB ports of the unit.
4. Optionally connect a stereo audio cable (3.5mm to 3.5mm) to connect the audio output of the computers to the AUDIO IN ports of the unit.
5. Connect a monitor to the HDMI OUT console port of the unit using a **HDMI cable**.
6. Connect a USB keyboard and mouse to the two USB console ports.
7. Optionally connect stereo speakers to the AUDIO OUT port of the unit.
8. Optionally connect a RS-232 Cable to the RS-232 port.
9. Finally, power on the KVM by connecting a **12VDC power supply** to the power connector, and then turn on all the computers.



HDMV-9X-PLUS Shown




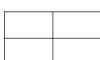
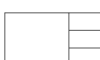
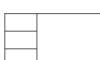

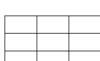
SYSTEM OPERATION

When selecting a channel by pressing buttons 1-9 on the front panel, the blue backlight LED will light up to indicate that input is selected.



SELECTING VIEWING MODES

There are a total of 8 viewing modes within the 4 categories, this is a list of all the modes based on the Number given in the command protocol:

-  1 - Full Screen
-  2 - Dual (Split)
-  3 - Dual (PiP)
-  4 - Quad (Equal)
-  5 - Quad (T-Quad Right)
-  6 - Quad (T-Quad Left)
-  7 - Quad (T-Quad Bottom)
-  8 - 9X

One of the four Mode Select buttons (FULL, DUAL, QUAD, and 9X) can be used to switch the current viewing mode. For the options with multiple viewing modes, multiple presses of the mode button will switch to a different variation within that same mode. Please refer to the viewing mode list above for more detail on these modes.

When in viewing modes with multiple screens on the display, any specific input can be assigned to any specific position on the display. For example, the 9x Mode (Mode #8) can be divided in the following way:

1	2	3
4	5	6
7	8	9

SELECTING VIEWING MODES (CONTINUED)

Each section of the display can be considered a separate “output”. To configure input and output for any of the 8 display modes the following command is used:

IN -> [select input 1-9] -> OUT -> [select output 1-9]

ex. Dual Mode (split)

Input 1 is display on Output 1. Input 2 is displayed on Output 2



To change Output 1 to display Input 3
INPUT -> 3 -> OUTPUT -> 1



To change Output 2 to display Input 4
INPUT -> 4 -> OUTPUT -> 2



RESOLUTION BUTTON

Pressing the Resolution button (RES) cycles between the available resolutions. Here is a chart of the resolution options and the numbers associated with them. To view the current resolution, use the RS-232 command (`//r?`).

Resolution Number	Specifications
1	4K
2	1080p
3	1080i
4	720p
5	1360 x 768
6	1024 x 768

RS-232 AND HOTKEY COMMANDS

The HDMV-9X-PLUS may also be controlled via RS-232 and Hotkey commands.

For RS-232, you must use HyperTerminal or an alternative terminal application. The settings for the connection are as follows:

Baudrate 115200; Data Bits 8; Parity None; Stop Bits 1; Flow Control None.

To use the HotKey commands, the keyboard must be connected to the designated keyboard or mouse USB slot.

The following commands can be used for RS-232 and Hotkey control:

Command Description	RS-232	Hotkey
Switch USB and Video	<code>//m[in#] [ENTER]</code>	<code>[ctrl][ctrl]m[in#] [ENTER]</code>
Switch Only Video IN	<code>//c[in#] [ENTER]</code>	<code>[ctrl][ctrl]c[in#] [ENTER]</code>
Switch Only Video IN/OUT	<code>//i[in#] [out#] [ENTER]</code>	<code>[ctrl][ctrl]i[in#] [out#] [ENTER]</code>
Switch to Video Mode [1-8]	<code>//x[mode #] [ENTER]</code>	<code>[ctrl][ctrl]x[mode #] [ENTER]</code>
Get Current Video Mode	<code>//x? [ENTER]</code>	-
Switch KM Devices Only	<code>//k[in#] [ENTER]</code>	<code>[ctrl][ctrl]k[in#] [ENTER]</code>
Switch USB 2.0 Devices Only	<code>//u[in#] [ENTER]</code>	<code>[ctrl][ctrl]u[in#] [ENTER]</code>
Switch Resolution	<code>//p[1-6] [ENTER]</code>	<code>[ctrl][ctrl]p[1-6] [ENTER]</code>
Resolution Status	<code>//p? [ENTER]</code>	-
Set EDID	<code>//e[1-2] [ENTER]</code>	<code>[ctrl][ctrl]e[1-2] [ENTER]</code> 1: EDID 1.4 2: EDID copy HDMI out
EDID Status	<code>//e? [ENTER]</code>	-
Audio SET	<code>//a[1-9] [ENTER]</code>	<code>[ctrl][ctrl]a[1-9] [ENTER]</code>
Audio Status	<code>//a?</code>	-

TROUBLESHOOTING

No Power

- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

No Video

- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers

Keyboard is not working

- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

Mouse is not working

- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

No Audio

- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty

SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

- a. Improper or inadequate maintenance or modifications
- b. Operations outside product specifications
- c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

B. Limitations of warranty

To the extent allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

Smart-AVI

SMART AUDIO VIDEO INNOVATION

NOTICE

The information contained in this document is subject to change without notice. SmartAVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for particular purpose. SmartAVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. No part of this document may be photocopied, reproduced, or translated into another language without prior written consent from SmartAVI, Inc.

20180109



Designed and Manufactured in the USA

Tel: (800) AVI-2131 • (702) 800-0005
2455 W Cheyenne Ave, Suite 112
North Las Vegas, NV 89032

www.smartavi.com